

# TURNOVER

## Mission statement

## Schematic representation

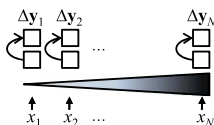
## Analysis

T1. Measure turnover between two communities.



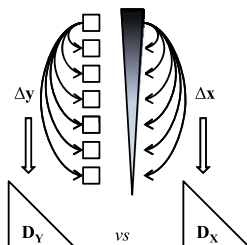
Calculate  $\Delta y$   
(e.g., Jaccard or Sørensen).

T2. Model turnover between two communities along an environmental factor or gradient.



Linear or non-linear  
regression of  $\Delta y$  vs  $x$ .

T3. Model pair-wise dissimilarities in communities as a function of pair-wise spatial, temporal or environmental distances.

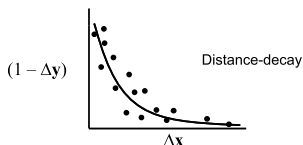


Linear or non-linear  
regression of  $\Delta y$  vs  $\Delta x$ .

The Mantel test:  
test of the null hypothesis  
of no relationship between  
two distance matrices.

Examine relationship at a  
series of distance classes:  
Mantel correlogram.

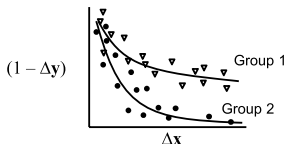
T4. Estimate the rate of turnover along a spatial, temporal or environmental gradient.



Linear or non-linear  
model of  $(1 - \Delta y)$  vs  $\Delta x$ .

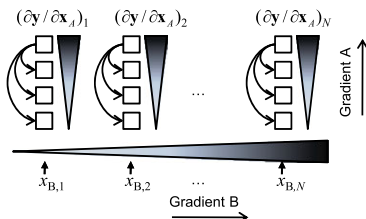
Rate  $(\partial y / \partial x)$  is the  
estimated slope of a  
distance-decay model.

T5. Compare rates of turnover along one gradient for different groups of species or taxa.



Compare slope (and  $r^2$ )  
values obtained for two  
different groups  
 $(\partial y_1 / \partial x)$  and  $(\partial y_2 / \partial x)$ .

T6. Model the rate of turnover along one gradient (A) across the levels of a factor or along a second gradient (B).



Linear or non-linear  
regression of  
 $(\partial y / \partial x_A)$  vs  $x_B$ .